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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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Chethan Gorur

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EXAMINER

MEYERS, MATTHEW S

ART UNIT

PAPER NUMBER

3629

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DELIVERY MODE

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 09/978,277	Applicant(s) GORUR ET AL.	
	Examiner Matthew S. Meyers	Art Unit 3629	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/16/07.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☐ Claim(s) 1-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) 1-31 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is in response to applicant's communication on 11/16/07, wherein claims 1-31 are currently pending.

Election/Restrictions

2. Applicant has elected with traverse Group I. Additionally, in response to applicant's traversal arguments, the Examiner agrees. With regard to Group II, specifically claim 31, upon reconsideration, Examiner believes that the restriction requirement between Groups I and II was improper. Thus, consistent with MPEP § 821.01, Examiner has rejoined Group I with Group II. However, with respect to Group III, the restriction requirement stands final. Therefore, the restriction stands Group I (Claims 1-31) and Group II (Claims 32-40).

Requirement for Information under 37 CFR 1.105

3. Applicant and the assignee of this application are required under 37 CFR 1.105 to provide the following information that the examiner has determined is reasonably necessary to the examination of this application.

4. While conducting a search on the present application, the Examiner has come across information on which he believes to be necessary to examination. Specifically, Examiner believes that applicant's invention was in use prior to filing the application (§1.105(a)(1)(vii)). Examiner bases this belief upon several documents found while

Art Unit: 3629

conducting the search; including *i2 Announces the Inception of a New Business Super Portal at 11Planet 99SM*: The High Velocity Business Summit which is dated October 11, 1999 (cited below and included in the References Cited). Specifically, regarding this document, Examiner would like to know, how "Tradematrix intuitively handles diverse workflows and market mechanisms" as described in the article versus how they are doing it differently in the present application and other features touched upon in the document.

5. Additionally, the Examiner has come across information leading the Examiner to believe there was a website under the address www.tradematrix.com which was cited in a U.S. Patent (Thackston, US 6,295,513). The Examiner would like to know what technical information known to applicant concerning the related art, the disclosure, the claimed subject matter, other factual information pertinent to patentability, or concerning the accuracy of the examiner's stated interpretation of such items is related to this website (§1.105(a)(1)(viii)). Moreover, Examiner would like any other related information on the website such as screen shots or other data relevant to the pending prosecution (§1.105(a)(1)(iii)).

6. The fee and certification requirements of 37 CFR 1.97 are waived for those documents submitted in reply to this requirement. This waiver extends only to those documents within the scope of the requirement under 37 CFR 1.105 that are included in the applicant's first complete communication responding to this requirement. Any supplemental replies subsequent to the first communication responding to this requirement and any information disclosures beyond the scope of this requirement

Art Unit: 3629

under 37 CFR 1.105 are subject to the fee and certification requirements of 37 CFR 1.97 where appropriate.

7. The applicant is reminded that the reply to this requirement must be made with candor and good faith under 37 CFR 1.56. Where the applicant does not have or cannot readily obtain an item of required information, a statement that the item is unknown or cannot be readily obtained will be accepted as a complete reply to the requirement for that item.

Claim Rejections - 35 USC § 112

8. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

9. Claims 1-31 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Applicant has set forth a "state machine" in independent claims 1, 11, 21, and 31, it is unclear as to how one skilled in the art would be able to make or use applicant's invention without undue experimentation regarding the operations occurring within the state machine. In its broadest sense, a "state machine" transforms something inputted into something else. Thus, applicant has not provided any direction or guidance as to

Art Unit: 3629

how this transformation is occurring which would enable one skilled in the art at the time of the invention to make/use the invention the invention without undue experimentation.

10. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

11. Claims 1-31 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. It is unclear as to what applicant is claiming in independent claims 1, 11, 21, and 31 as to what "state information", "action information", and "transition information" is comprised of. Applicant refers to "state", "action", and "transition " information in dependent claims 7, 8, and 9 respectively, but does not what this information is determined from or where it is found or how it is accessed. Additionally, Examiner is unclear as to what a "plurality of graphs" and a "plurality of text files" refers to. Is it 2, 3 or possible more? Does this "plurality" always remain a consistent number of graphs? What happens if there is more than 3 text files? What would they comprise?

Claim Rejections - 35 USC § 101

12. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

13. **Claims 1-31** are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Under the statute, the claimed invention must fall into one of the four recognized statutory classes of invention, namely, a process (or method); a machine (or system); an article of manufacture; or a composition of matter.

Exemplary Claim 1 is directed to a state machine. However, it is unclear as to which recognized statutory class of invention the “state machine” of claims 1-31 are directed. In particular, a “state machine” is not a process or a method, as it lacks a series of steps. A “state machine” is not a machine or system, as there is no specific recitation of machine or system components. A “state machine” is not recognized as a composition of matter. A “state machine” has been described as, “an initial state or record of something stored someplace, a set of possible input events, a set of new states that may result from the input, or a set of possible actions or output events that result from a new state.” (*Real-time Object-oriented Modeling*, Bran Selic & Garth Gullekson, John Wiley & Sons; 1 edition (April 22, 1994)) Since these objects are not typically fixed in some tangible medium, the Examiner is unclear as to what possible category a “state machine” may be proper in.

14. **Claims 1-31** are rejected under 35 U.S.C. 101 because for a claimed invention to be statutory, the claimed invention must produce a useful concrete, and tangible result. “Usefulness” may be evidenced by, but not limited to, a specific utility of the claimed invention. “Concreteness” may be evidence by, but not limited to, repeatability and/or implementation without undue experimentation. “Tangibility” may be evidence by, but not limited to, a real or actual effect.

In the present case, a "state machine" appears to be directed towards an "abstract" idea, e.g. generic, does not handle "real world" data or provide a "practical application", thus not tangible. Applicant has not given any direction or guidance as to what occurs in this "state machine". Examiner is unclear as to whether this "state machine" consists of mathematical operations or simply manipulating abstract ideas without some practical application. Therefore, the applicant's invention is not capable of providing tangible results as required by 35 U.S.C. 101.

Claim Rejections - 35 USC § 103

15. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

16. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

17. Claims 1-31 are rejected under 35 U.S.C. 103(a) as being unpatentable over i2 Announces the Inception of a New Business Super Portal at 11Planet 99SM: The High

Art Unit: 3629

Velocity Business Summit PLANET99, LAS VEGAS, Nev., Oct. 11, Canada NewsWire, October 11, 1999, Monday. (Hereinafter referred to as Planet99) in view of *U.S.*

Department of Housing and Urban Development Signs \$5.8 Million Agreement with MicroStrategy, Microstrategy, May 16, 2000:

<http://www.microstrategy.com/news/pr_system/press_release.asp?ctry=167&id=437>

(Hereinafter referred to as Microstrategy).

18. With respect to **Claims 1, 11, and 21:**

19. Planet99 discloses a computer-implemented state machine for processing business objects representing collaborations between business entities (Planet99, Page 1, “The TradeMatrix intelligent eBusiness portal will offer value-added services that span multiple digital marketplaces and is tailored for buyers, sellers, designers and service providers.”), comprising:

- a. at least one business object, the business object representing a collaboration between a plurality of business entities (Planet99, Page 2, “Examples of value-added features TradeMatrix provides:...”); and
- b. features which display and dynamic marketplaces corresponding to a particular collaborating business entity, the plurality of dynamic marketplaces being generated using a plurality of text files, at least a first of the text files comprising state information associated with the business object, at least a second of the text files comprising action information associated with the business object, and at least a third of the text files comprising transition

information associated with the business object (Planet99, Page 2, "One collective site that taps into multiple marketplaces and sites").

c. Planet 99 discloses the above limitations, but does not explicitly disclose wherein the display and dynamic marketplaces are explicitly a plurality of graphs represented in computer-readable media. Planet99 also discloses "No single company can build a solution of this magnitude alone. TradeMatrix combines the experience and expertise of world-class eBusiness solution providers dedicated to creating value on the Internet. Powered by i2, TradeMatrix encompasses leading content, technology, infrastructure, and marketplace providers."

Microstrategy teaches an Intelligent E-Business™ software, which also displays information will be accessible through many mediums, including graphs and charts, as well as spatially through an integrated Geographic Information System (GIS)." (Microstrategy, Page 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to have included a graph functionality into their eBusiness solution software in order to allow customer using the software a quick, simple and easy way to utilize and analyze raw data in a meaningful way. This feature which seems to be implied within the Planet99 material would have easily been incorporated into the software described in Planet99 since TradeMatrix is built on open standards, enabling the participation of leading marketplace partners and technologies (Planet99, Page 1).

20. With respect to **Claims 2, 12, and 22:**

Art Unit: 3629

21. Planet99 discloses wherein the graphs are stored in a state transition matrix for the state machine (Planet99, Pages 1-2, "TradeMatrix offers buyers the most expansive catalog of products and services for direct and indirect needs by spanning existing digital marketplaces. By bringing together services for buyers, sellers, designers and service providers, TradeMatrix is the one-stop portal for trading among the full scope of digital marketplaces,").

22. With respect to **Claims 3, 13, and 23:**

23. Planet99 discloses wherein the graphs are adjacency graphs and the state transition matrix is a multidimensional adjacency matrix (Planet99, Pages 1-2, "TradeMatrix offers buyers the most expansive catalog of products and services for direct and indirect needs by spanning existing digital marketplaces. By bringing together services for buyers, sellers, designers and service providers, TradeMatrix is the one-stop portal for trading among the full scope of digital marketplaces,").

24. With respect to **Claims 4, 14, and 24:**

25. Planet99 discloses wherein the state transition matrix comprises three dimensions (Planet99, Pages 1-2, "TradeMatrix offers buyers the most expansive catalog of products and services for direct and indirect needs by spanning existing digital marketplaces. By bringing together services for buyers, sellers, designers and service providers, TradeMatrix is the one-stop portal for trading among the full scope of digital marketplaces,").

26. With respect to **Claims 5, 15, and 25:**

Art Unit: 3629

27. Planet99 discloses wherein a first dimension of the state transition matrix represents a state identifier associated with the business object, a second dimension of the state transition matrix represents an action identifier associated with the business object, a third dimension of the state transition matrix represents an entity identifier associated with the business object, and information stored in the state transition matrix comprises state values resulting from a computation performed by the state machine (Planet99, Pages 1-2, "TradeMatrix offers buyers the most expansive catalog of products and services for direct and indirect needs by spanning existing digital marketplaces. By bringing together services for buyers, sellers, designers and service providers, TradeMatrix is the one-stop portal for trading among the full scope of digital marketplaces,").

28. With respect to **Claims 6, 16, and 27:**

29. Planet99 discloses wherein the collaborating business entities comprise at least a customer and a supplier (Planet99, Pages 1-2, "TradeMatrix offers buyers the most expansive catalog of products and services for direct and indirect needs by spanning existing digital marketplaces. By bringing together services for buyers, sellers, designers and service providers, TradeMatrix is the one-stop portal for trading among the full scope of digital marketplaces,").

30. With respect to **Claims 7, 17, and 27:**

31. Planet99 discloses wherein the state information comprises at least one of state identifier information, state handler class information, synchronization requirement information, and super-state relationship information (Planet99, Pages 1-2, "TradeMatrix

Art Unit: 3629

offers buyers the most expansive catalog of products and services for direct and indirect needs by spanning existing digital marketplaces. By bringing together services for buyers, sellers, designers and service providers, TradeMatrix is the one-stop portal for trading among the full scope of digital marketplaces,").

32. With respect to **Claims 8, 18, and 28:**

33. Planet99 discloses wherein the action information comprises at least one of allowed action information and update rule information (Planet99, Pages 1-2, "TradeMatrix offers buyers the most expansive catalog of products and services for direct and indirect needs by spanning existing digital marketplaces. By bringing together services for buyers, sellers, designers and service providers, TradeMatrix is the one-stop portal for trading among the full scope of digital marketplaces,").

34. With respect to **Claims 9, 19, and 29:**

35. Planet99 discloses wherein the transition information comprises at least one of entity type information, starting state information, action taken information, and resulting state information (Planet99, Pages 1-2, "TradeMatrix offers buyers the most expansive catalog of products and services for direct and indirect needs by spanning existing digital marketplaces. By bringing together services for buyers, sellers, designers and service providers, TradeMatrix is the one-stop portal for trading among the full scope of digital marketplaces,").

36. With respect to **Claims 10, 20, and 30:**

37. Planet99 discloses wherein the state machine is one of a plurality of state machines within a computer-implemented system for collaboration between business

Art Unit: 3629

entities, each state machine comprising a state transition matrix that contains information representing a plurality of graphs for the state machine and that has been generated using a plurality of text files for the state machine, each graph corresponding to a particular collaborating business entity (Planet99, Pages 1-2, "TradeMatrix offers buyers the most expansive catalog of products and services for direct and indirect needs by spanning existing digital marketplaces. By bringing together services for buyers, sellers, designers and service providers, TradeMatrix is the one-stop portal for trading among the full scope of digital marketplaces,").

38. With respect to **Claim 31**:

39. Planet99 discloses a computer-implemented state machine for processing business objects representing collaborations between business entities (Planet99, Page 1, "The TradeMatrix intelligent eBusiness portal will offer value-added services that span multiple digital marketplaces and is tailored for buyers, sellers, designers and service providers."), comprising:

- d. at least one business object, the business object representing a collaboration between a plurality of business entities (Planet99, Page 2, "Examples of value-added features TradeMatrix provides:..."); and
- e. data represented in a computer-readable medium, corresponding to a particular collaborating business entity (Planet99, Page 2, "One collective site that taps into multiple marketplaces and sites").
- f. Planet 99 discloses the above limitations, but does not explicitly disclose wherein the data represented in a computer-readable medium are explicitly a

plurality of graphs represented in computer-readable media. Planet99 also discloses "No single company can build a solution of this magnitude alone. TradeMatrix combines the experience and expertise of world-class eBusiness solution providers dedicated to creating value on the Internet. Powered by i2, TradeMatrix encompasses leading content, technology, infrastructure, and marketplace providers." Microstrategy teaches an Intelligent E-Business™ software, which also displays information will be accessible through many mediums, including graphs and charts, as well as spatially through an integrated Geographic Information System (GIS)." (Microstrategy, Page 1). It would have been obvious to one of ordinary skill in the art at the time of the invention to have included a graph functionality into their eBusiness solution software in order to allow customer using the software a quick, simple and easy way to utilize and analyze raw data in a meaningful way. This feature which seems to be implied within the Planet99 material would have easily been incorporated into the software described in Planet99 since TradeMatrix is built on open standards, enabling the participation of leading marketplace partners and technologies (Planet99, Page 1).

- i. at least a first of the text files comprising state information associated with the business object, the state information comprising at least one of state identifier information, state handler class information, synchronization requirement information, and super-state relationship information; at least a second of the text files comprising action

information associated with the business object, the action information comprising at least one of allowed action information, and update rule information; and at least a third of the text files comprising transition information associated with the business object, the transition information comprising at least one of entity type information, starting state information, action taken information, and resulting state information; the graphs being stored in a three-dimensional state transition matrix for the state machine, a first dimension of the state transition matrix representing a state identifier associated with the business object, a second dimension of the state transition matrix representing an action identifier associated with the business object, a third dimension of the state transition matrix representing an entity identifier associated with the business object, and information stored in the state transition matrix comprising state values resulting from a computation performed by the state machine (Planet99, Pages 1-2, "TradeMatrix offers buyers the most expansive catalog of products and services for direct and indirect needs by spanning existing digital marketplaces. By bringing together services for buyers, sellers, designers and service providers, TradeMatrix is the one-stop portal for trading among the full scope of digital marketplaces,").

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew S. Meyers whose telephone number is (571) 272-7943. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Weiss can be reached on (571) 272-6812. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Matthew S. Meyers/
Examiner, Art Unit 3629

2/3/08

/John G. Weiss/

Supervisory Patent Examiner, Art Unit 3629